

EDUCATION

Master of Science, Marine Science

December 1991

University of South Carolina

Thesis: **Spatial and Temporal Variability in Abundance of an Intertidal Polychaete, *Streblospio benedicti***

Bachelor of Science, Zoology (Fisheries Biology)

June 1988

Fort Valley State University

TECHNICAL EXPERIENCES

Possess good writing and statistical skills. Experienced in research project design and population analysis. Conducted studies to assess the response of invertebrates to habitat alterations caused by nutrient enrichment in the northern Everglades. Assisted in collection, analysis and manuscript preparation of data used to determine the role of periphyton in nutrient cycling. Conducted experiments to determine metabolic related processes (i.e. periphyton photosynthetic rates, phosphorus uptake rates, animal growth rates and assimilation rates in invertebrates). Used taxonomic, statistical, and ecological skills to document changes in the macroinvertebrate assemblages of the northern Everglades. Used technical and organizational skills to oversee sampling and analysis of macroinvertebrates. Previous work includes conducting mesocosm studies to determine chemical effects on aquatic systems for registration under EPA Guidelines 72-7(a). Used taxonomic skills to identify and catalog freshwater zooplankters as well as estuarine and freshwater macrofauna within the North Inlet Estuary (SC). Conducted studies to determine anthropogenic effects on oyster physiology in estuarine systems. Participated in otolith studies to determine the onset of the first annulus in winter flounder. Conducted numerous monitoring projects to determine population diversities and temporal and spatial anomalies.

ADMINISTRATIVE EXPERIENCES

Experienced in data preparation for publication (i.e. reports and manuscripts prep) and presentations (i.e. scientific meetings and conferences). Prepared progress and budget reports for a variety programs as a project coordinator. Organized and implemented lectures, field trips, seminars and research projects for undergraduates and high school students. Served as a liaison between student participants and scientific investigators on large-scale population studies of the North Atlantic. Served as QA coordinator to assure project compliance with GLP regulations. Conduct seminars and presentation on Everglades' research to general public and educational facilities.

Robert Benjamin Eugene Shuford, III
3817 Heath Circle South
West Palm Beach Florida 33407
(561) 683-0192

EMPLOYMENT HISTORY

April 1996	South Florida Water Management District Environmental Scientist
January 1994	South Florida Water Management District Senior Scientific Technician
March 1992	Toxikon Environmental Sciences Aquatic Ecologist
June 1991	Dept. of Geological Sciences University of South Carolina NSF/REU Program Coordinator
August 1988	Marine Science Program University of South Carolina Research/Teaching Assistant
June 1987	B.W. Baruch Marine Laboratory University of South Carolina Research Intern
August 1986	Northeast Fisheries Center National Marine Fisheries Service Biological Aide (Fisheries)
June 1986	Howard University/Rockefeller Foundation Minority Program for High School Participants Research Coordinator
June 1985	Southeast Fisheries Center National Marine Fisheries Service Student Researcher

AWARDS /ACCOMPLISHMENTS

April 1995	Outstanding Young Men of America
March 1999	Employee of the Month (SFWMD)

PROFESSIONAL ORGANIZATIONS

North American Benthological Society, American Society of Limnology and Oceanography (ASLO), Associate Member of Sigma Xi (The Scientific Research Society), National Association of Black Geologist and Geophysicists (NABGG)

PUBLICATIONS:

Thesis: **Spatial and Temporal Variability in Abundance of the Polychaete Worm, *STREBLOSPIO BENEDICTI*, WEBSTER 1879**

McCormick, Paul V., R.B.E. Shuford, III, J.G. Backus, and W.C. Kennedy. 1998. Spatial and seasonal patterns of periphyton biomass and productivity in the Northern Everglades, FL USA. *Hydrobiologia* 362:185-208.

McCormick, Paul V., and R.B.E. Shuford, III, in review. Periphyton phosphorus fluxes in a constructed wetland in south FL. *J Environ. Qual.*

Shuford, R.B.E., III, J. Magson, and P.V. McCormick. **In prep.** Habitat related growth in the Everglades apple snail, *Pomacea paludosa*.

Shuford R.B.E., III, P.V. McCormick, J. Magson, and R.B. Frydenborg. **In prep.** Macroinvertebrate response to two habitats in the oligotrophic Everglades. (Working title)

PRESENTATIONS:

Invertebrate Functional and Structural Changes in Two Everglades Habitats

Presented at the joint meetings of the International Association of Landscape Ecologist and the Walt Dineen Society (April 2000)

Macroinvertebrate Structural And Functional Changes Along A Nutrient Gradient In The Florida Everglades, R.B.E. Shuford, III, P.V. McCormick, P.S. Rawlik Jr., and R.B Frydenborg

Presented at the 47th Annual North American Benthological Society (1999)

The Use of an Outdoor Aquatic Microcosm System to Assess Toxicant-Induced Stress on Aquatic Organisms. G.M. Rand, J.A. Aufderhiede, A.E. Daehnick, M.W. Heyn, R.B.E. Shuford, III, and J.R. Clark

Presented at the Eight International Union of Pure and Applied Chemistry (1994)

Spatial and Temporal Variations in the Abundance of an Intertidal Polychaete, *Streblospio benedicti*. R.B.E. Shuford, III

Presented at the 1992 American Society of Limnology and Oceanography Meetings

Sediment effects on the spatial patterns of *Streblospio benedicti*. R.B.E. Shuford, III

Presented at the 1991 National Association of Black Geologist and Geophysicists Conference

Techniques in Age Analysis of the Winter Flounder, *Pseudopleuronectes americanus*. R.B.E. Shuford, III

Presented at the 1987 BKX Scientific Honor Society National Meetings

Robert Benjamin Eugene Shuford, III
3817 Heath Circle South
West Palm Beach Florida 33407
(561) 683-0192

Informal Seminars:

Department of Biological Sciences
Fort Valley State University

Environmental Conservation
Palm Beach Community College

Department of Biology
Bethune Cookman College

"Importance of Graduate School"

"New Approaches to Population Biology
Of Benthic Infauna"

"Careers in Aquatic Sciences"